

The "this" Keyword

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this - Keyword

- ✓ Used within the same class where it is defined
- ✓ Used to access
 - ✓ the data members
 - ✓ Constructors
 - ✓ member functions
 - ✓ of the same class where its is defined

this – Keyword – Accessing Constructor

- ✓ Constructor is one of the member function of the same class
- ✓ Constructor can be invoked using “this” Keyword
 - ✓ `this(p1, p2, p3);`
 - ✓ Calls current class constructor which has the parameters namely p1, p2, p3

Example

Class Test

```
{
    Test (int x, int y, int z)
    {
        this(x,y);
        System.out.println("The Value of z:" + z);
    }
    Test (int x, int y)
    {
        this(x);
        System.out.println("The Value of y:" + y);
    }
    Test (int x)
    {
        System.out.println("The Value of x:" + x);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test(11,12,13);
    }
}
```

this – Keyword – Accessing Variables

- ✓ Can be used to access Variables of the same class

Example

Class Test

```
{
    int a = 10;
    void m1( )
    {
        System.out.println("The Value of a:" +this.a);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test( );
        t.m1( );
    }
}
```

this – Keyword – Accessing Methods

- ✓ Can be used to access Methods of the same class

Example

Class Test

```
{
    int a = 10;
    void m1()
    {
        System.out.println("The Value of a:" + this.a);
        this.m2();
    }
    void m2()
    {
        System.out.println("The Value of a:" + this.a);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test( );
        t.m1();
    }
}
```


this – Keyword – Automatically added

- ✓ Can be added automatically by the Compiler

this – Keyword – Automatically added

Class Test

```
{
    int a = 10;
    void m1()
    {
        System.out.println("The Value of a:" + a);
        m2();
    }
    void m2()
    {
        System.out.println("The Value of a:" + a);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test( );
        t.m1();
    }
}
```

this – Keyword – Then why ? and When?

Class Test

```
{
    int a, b;
    Test (int x, int y)
    {
        a = x;
        b = y;
    }
    void m1()
    {
        System.out.println("The Value of a:" +this.a);
        System.out.println("The Value of a:" +this.b);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test(11,12);
        t.m1( );
    }
}
```

this – Keyword – Check the Output

Class Test

```
{
    int a, b;
    Test (int a, int b)
    {
        a = a;
        b = b;
    }
    void m1()
    {
        System.out.println("The Value of a:" +this.a);
        System.out.println("The Value of a:" +this.b);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test(11,12);
        t.m1();
    }
}
```

this – Keyword – Use now

Class Test

```
{
    int a, b;
    Test (int a, int b)
    {
        this.a = a;
        this.b = b;
    }
    void m1()
    {
        System.out.println("The Value of a:" +this.a);
        System.out.println("The Value of a:" +this.b);
    }
}
```

Class Demo

```
{
    public static void main(String args[])
    {
        Test t = new Test(11,12);
        t.m1( );
    }
}
```

Thank you